

PRELIMINARY GEOLOGIC INVESTIGATION  
OF DAM SITES

Sheet \_\_\_\_ of \_\_\_\_

Watershed \_\_\_\_\_ Subwatershed \_\_\_\_\_ Site no. \_\_\_\_\_ County \_\_\_\_\_ State \_\_\_\_\_  
Location \_\_\_\_\_ Site group \_\_\_\_\_ Structure class \_\_\_\_\_ Fund class \_\_\_\_\_  
Nearest post office \_\_\_\_\_ Landowner/operator \_\_\_\_\_  
Drainage area: \_\_\_\_\_ sq. mi. \_\_\_\_\_ acres. Purpose(s) of structure \_\_\_\_\_  
Embankment: Length \_\_\_\_\_ ft. Height \_\_\_\_\_ ft. Cubic yards \_\_\_\_\_ Est. storage capacity \_\_\_\_\_ ac. ft.  
This investigation made by: Inspection of surface \_\_\_\_\_ Hand auger \_\_\_\_\_ Test pits \_\_\_\_\_ Other(specify) \_\_\_\_\_  
Investigated by: \_\_\_\_\_ Signature and Title \_\_\_\_\_ Date \_\_\_\_\_

GENERAL GEOLOGY

Physiographic description \_\_\_\_\_ Geologic formation(s) \_\_\_\_\_  
\_\_\_\_\_ Attitude: Strike \_\_\_\_\_ Dip \_\_\_\_\_  
Direction of valley axis (downstream) \_\_\_\_\_ Steepness of abutments: Left \_\_\_\_\_ percent. Right \_\_\_\_\_ percent  
Material of abutment and valley walls \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Surficial deposits \_\_\_\_\_  
\_\_\_\_\_  
Faults, folds, joints, caverns, and slice areas (describe briefly): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Depths to and lithology of rock in foundation \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ Extractable minerals? \_\_\_\_\_ Depth to groundwater \_\_\_\_\_ Date \_\_\_\_\_  
Leakage problems \_\_\_\_\_

EMERGENCY SPILLWAY

Best location: Left abutment \_\_\_\_\_ Right abutment \_\_\_\_\_ Other \_\_\_\_\_  
Estimated excavation: Rock \_\_\_\_\_ yds.; Common \_\_\_\_\_ yds.; Suitable for fill? \_\_\_\_\_ Type \_\_\_\_\_ (GC. CL. etc.)  
Erodibility of control section \_\_\_\_\_ (high, medium, low, or very low) Erodibility of exit channel \_\_\_\_\_ (high, medium, low, or very low)

STREAM OR OUTLET CHANNEL

Description: width \_\_\_\_\_ ft.; Depth \_\_\_\_\_ ft.; Bed material \_\_\_\_\_ D<sub>50</sub> \_\_\_\_\_ in. D<sub>75</sub> \_\_\_\_\_ in.  
Channel: Scouring \_\_\_\_\_ Aggrading \_\_\_\_\_ Stable \_\_\_\_\_; Rock \_\_\_\_\_; Banks: Eroding \_\_\_\_\_ Stable \_\_\_\_\_  
Remarks \_\_\_\_\_

(continued on next page)

## BORROW AREAS

No. \_\_\_\_\_ Location \_\_\_\_\_ Direction from dam \_\_\_\_\_ Distance \_\_\_\_\_ Probable depth \_\_\_\_\_ Area \_\_\_\_\_

Cubic yards available \_\_\_\_\_ Description of material \_\_\_\_\_

Description of materials underlying borrow area \_\_\_\_\_

\_\_\_\_\_ Depth of water \_\_\_\_\_ Are salts or dispersed soils present? \_\_\_\_\_

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Cubic yards available \_\_\_\_\_ Description of material \_\_\_\_\_

Description of materials underlying borrow area \_\_\_\_\_

\_\_\_\_\_ Depth of water \_\_\_\_\_ Are salts or dispersed soils present? \_\_\_\_\_

SUMMARY OF FINDINGS, INTERPRETATIONS, AND CONCLUSIONS